

**Specification: Tile backer board on external timber/metal framed walls clad with plywood**

**Product Ref:** Marmox Multiboard

**Product Use:** Intermediate substrate to ceramic and stone tiling external walls pre-clad with plywood or exterior boarding

**Manufacturer:** Marmox Ltd

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**Description:** Extruded polystyrene covered on both sides with fibreglass mesh encased in a c.0.75mm layer of polymer modified concrete which permanently bonds the mesh to the polystyrene.

<b>Dimensions</b>	STD.	Width: 600mm, Length: 1250mm, Thickness: 10, 12.5, 20, 30, 40, 50, 60mm
<b>allowed for</b>	LONG	Width: 600mm, Length: 2500mm, Thickness: 10, 12.5, 20, 30, 40, 50, 60mm
<b>this application:</b>	BIG	Width: 1200mm, Length: 2400mm, Thickness: 12.5, 20mm

**Properties:** Decoupling between the tiled surface and the sub-structure, thermal Insulation unaffected by moisture, waterproofing, and enhanced tile adhesion.

**Authorities:** ISO9001 (*Bureau Veritas*), Energy Saving Trust Recommended for insulation.  
 BS EN 5385-2: Code of practice for the design and installation of external ceramic wall tiling.

**CE Marking:** EN13164 – T1 – CS(10\Y)400 – CC(2/1/10)115 – WL(T)3

**Fixing Method:** The Marmox board is fixed to an intermediate plywood layer with both tile adhesive and screws and washers.

- A VCL membrane is placed against the existing masonry wall.
- A stud frame with centres at 300mm is placed over the VCL providing an air gap of at least 50mm.
- A layer of 18mm plywood or other external grade boarding is secured to the frame.
- Boards should ideally be aligned in a staggered (Brick-bond) format.
- Boards are aligned so that their long edges correspond to where the studs are behind the plywood.
- Marmox Multiboards, are fixed to the plywood using a thin (2 – 3mm) bed of external grade tile adhesive.
- After curing, reinforce with corrosion resistant screws and Marmox washers through the plywood into each timber/metal stud every c.300mm
  - STD boards are fixed to 3 studs with 3 fixings per stud, 9 fixings per board.
  - LONG boards are fixed to 3 studs with 5 fixings per stud, 15 fixings per board.
  - BIG boards are fixed to 5 studs with 5 fixings per stud, 25 fixings per board.
- All board joints and screw-fixings are sealed with MSP-360.
- Scrim tape (reinforcing tape) should be placed over all board joints prior to tiling with adhesive

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**Notes:**

1. A breather membrane would normally be considered on the outer-side of the insulation but because Marmox Multiboard is a non-breathable waterproof barrier, a breather membrane would not have any purpose in this detail.
2. All connections to building features e.g. window frames, are sealed with MSP-360.
2. The substrate should be constructed in accordance with BS5385 inasmuch that prior to the installation of Multiboard. The frame should be constructed so that all board edges are supported and of material that will not be subject to movement or warping resulting from changes in moisture content.
3. A 5mm movement gap should be created between the Multiboard and any restraining surface which should be filled with Marmox MSP-360.

**Limitations:**

1. Compounds containing organic solvents must not come into contact with Marmox board.
2. Temperatures in excess of 75°C are not appropriate.
4. This application is not suitable for use on the outside of buildings at heights above 11m in the UK or Ireland.